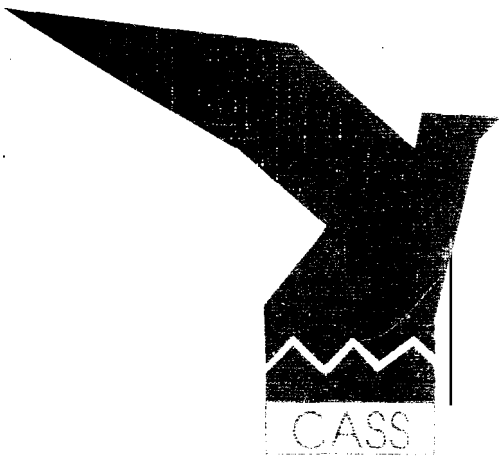
Centre for Applied Social Sciences



TOWARDS REFORMING THE INSTITUTIONAL AND LEGAL BASIS OF THE WATER SECTOR IN ZIMBABWE :

Current Weaknesses, Recent Initiatives and Their Operational Problems

Edited By

Calvin Nhira[1]

with Bill Derman [2]

August 1997

University of Zimbabwe

CENTRE FOR APPLIED SOCIAL SCIENCES *
University of Zimbabwe
P O Box MP 167
Mount Pleasant
HARARE
Zimbabwe

(CASS Occasional Paper - NRM Series ; CPN86 / 1997)

TOWARDS REFORMING THE INSTITUTIONAL AND LEGAL BASIS OF THE WATER SECTOR IN ZIMBABWE :

Current Weaknesses, Recent Initiatives and Their Operational Problems

Edited By

Calvin Nhira[1]

with Bill Derman [2]

August 1997

• A Member of IUCN - The World Conservation Union

---

[1] Lecturer, Centre for Applied Social Sciences, University of Zimbabwe.

[2] Professor of Anthropology & Associate Director of Research, African Studies Center, Michigan State University.

TABLE OF CONTENTS

BRIEF REFLECTIONS ON WATER LAW, WATER RIGHTS, WATER DISCOURSE AND THE ZAMBEZI VALLEY

Bill Derman

This paper briefly explores how the old water regime has affected the eastern Zambezi Valley and comparable areas. It is meant to contribute to a sense of the variations in water use and water problems in Zimbabwe. Each paper in this volume represents research conducted in different parts of Zimbabwe and therefore demonstrates differing perspectives on water management issues. The major exception is that of the ZIMWESI team who have all worked in the Eastern Highlands. In the broad consideration of Zimbabwe's water management issues, these differences and variations are analogous to upstream and downstream water users. Like water users, we see the system differently depending upon our perspective and position. In this spirit, I present a slightly different case and perspective than the others presented in this volume.

The Zambezi valley's environment is quite harsh; marked by extreme seasons, very high rates of evapo-transpiration during the dry season and great variability in rainfall from year to year. Within the valley, there is little formal irrigation although it has been the site of major development interventions. Like many communal areas in Zimbabwe, no one in the eastern Zambezi Valley has any legal right to withdraw water from the major rivers. The only legal water rights are, in fact, those of the parastatal, the Agricultural and Rural Development Authority (ARDA), which runs two large estates, one already irrigated, the other to be irrigated this year. It is not clear, however, that lack of water rights *per se* has blocked small-scale farmers from irrigating their land as much as the terrain and lack of capital. Small-scale farmers in other areas (particularly the eastern highlands) irrigate their land without legal water rights by simply digging furrows to divert water. [1] In addition, valley residents hand irrigate their riverine fields and gardens despite laws barring such streambank cultivation.

The issues in the eastern valley, though, are for the most part quite different. They revolve around large-scale planning exercises and village consolidation which are based on moving people away from the valley's seasonal rivers. I have been studying the largest of these projects, the Mid-Zambezi Valley Rural Development Project (MZP) for several years (Derman 1990; 1996; 1997). These processes are, at the end of the day, based upon the Streambank Cultivation Act and The Water Act which prohibit streambank or riverine cultivation. In short, national laws which were meant to prevent erosion in the highly incised high plateau are being used as the basis for development planning in a semi-arid valley environment. Valley residents regard scarce riverine land as a critical resource in their effort to cope with both drought and flood years.

It can be argued that MZP represents the continuation of the colonial mode of planning and conceptualizations of nature. Indeed, this mode of planning represents the consequences of radically different cultural approaches toward

nature and the apparent triumph of a 'scientific ... approach. The establishment of a private system of land ownership in ...n plateau combined with the private appropriation of water represents the cultural basis of European settlers. This cultural model appears to be dominant and will be difficult to effectively resist.

One dramatic change observed by many long-term Zambezi Valley residents is the loss of permanent water pools in the larger rivers that flow through the valley. They disagree as to its causes, but in general, they attribute it to the extensive dam construction by commercial farmers and government on the plateau. Many residents continue to hold to the view that water graces the land due to their great ancestral spirits, while others are more pragmatic. [2] Water, usually in the form of rainfall, has become a major focus of residents' lives due to the devastating droughts of 1991-92 and 1994-95. In their perspective, they regard their access to water as a fundamental right, although they would not express the principle in such a direct fashion. Residents disagree as to the causes of these two severe droughts. Many older people connect them with the loss of respect for their royal ancestral spirits (*mhondoros*), and the spilling of human blood without proper propitiation. [3]

There are currently two proposed irrigation projects in the eastern Zambezi Valley, in addition to the ARDA estates. Residents express complex and varied opinions about irrigation in the valley. Older residents tend to prefer the use of annually flooded riverine fields while migrants tend to favour irrigation schemes - both large and small scale. The irrigable land, however, will be available only for a small percentage of the valley's population. Overlooked in this discussion of irrigation projects, are women's gardens and fields which are hand irrigated and constitute a significant and growing contribution to household nutrition and income. Women's small-scale irrigation goes virtually unnoticed and, as is all-too-often the case, the assumption is that it can easily be replaced by larger-scale development interventions. [4] Results from 1996 dry season fieldwork indicate that household income and nutrition were suffering in households moved far from riverine environments.

Finally, there is the issue of domestic water supplies. While, from a hydrological perspective, domestic water use is a very small part of off-take from major rivers, it becomes highly significant for local populations in semi-arid environments dependent upon either dried river beds or boreholes. Tim Lynam (in his detailed study of 108 households in six valley villages) found that water accounted for the largest number of hours in the collection and use of common property resources. [5] Thus, access to and distance from water, has become a critical issue when the Mid-Zambezi Valley Rural Development Project moved many residents away from rivers as explained above. The project built some boreholes (many less to date than were promised) and these have often not been well-maintained. The boreholes have also become sources of water for livestock during the dry season, and women are also expected to establish vegetable gardens near them. Shallow river wells remain an essential back-up in case of the failure of boreholes.

Directly to the west of the project zone and a planned irrigation scheme are some of the most important Communal Area Management Programmes for Indigenous

barred from such utilization. The catchment farmers assert that they are not illegal users but rather that God and the ancestors bring rain. Balancing these competing interests and views will provide multiple challenges for the foreseeable future. The notion that one model can serve all is a highly debatable proposition.

The valley and other semi-arid environments will pose particular problems for water allocation. How and in what ways valley residents will be able to present a powerful voice among stakeholders is difficult to envision under current circumstances. It is always difficult for upstream users to see how they benefit from defraying their benefits for those of downstream users. This situation becomes intensified when the downstream users live in semi-arid areas and are engaged in less intensive agriculture. It will only be when water quality and the environment are systematically made part of water policy that regions like the eastern Zambezi Valley will be able to hold their own at the stakeholders table.

NOTES

1. The best descriptions of irrigation without formal water rights is provided in case studies by Bolding, Magadlela and van der Zaag in the University of Zimbabwe and Zimwesi, 1996. While their studies are located in the Eastern Highlands they could be duplicated in many communal areas where there are adequate supplies of water.
2. For a consideration of the contemporary role of royal ancestral spirits see Spierenburg 1995.
3. These beliefs are widespread and are found in all the case studies included in the Zimwesi volume. Vijfhuizen writes about the Mutema chieftaincy in south east Zimbabwe:

   > *People believe that royal ancestral spirits bring rain. Accordingly, they also believe that ancestors are able to keep away the rain or to stop it. People refer to conflicts between chiefs as reason for drought. They argue that these conflicts refrain chiefs from worshipping. Ancestors do not let it rain if they are not being worshipped. Hence, chiefs should solve their conflicts, unite and worship together. Then it will rain* (1996: 7).

   While I find summarizing the Mutema's beliefs in such a unitary fashion problematic, it is clear that very different views continue to persist about rain and ancestors than those of hydrologists, engineers, agricultural economists, etc.
4. Women's gardens are discussed by Holtzclaw and Derman in: *"Invisible Irrigation: Women and Development Projects in the Eastern Zambezi Valley, Zimbabwe"* (unpublished).
5. Personal communication, January 1997.
6. There is currently limited information on flow cycles and water quality. For a summary of the flow, see Johansson *et al.*, 1995.
7. The general SADC perspective on the environment can be found in SARD 1994